# Shelf Life of Select Contec<sup>®</sup> Healthcare Products Before and After Opening

We are frequently asked "How long can I use product "X" after opening?". For products from Contec® Healthcare, product "X" may include:

- 1. Bottles of disinfectant or cleaning solutions
- 2. Wipes presaturated with disinfectants or solutions such as 70% alcohol in DI water
- 3. Wipes that are saturated by compounding staff at the facility
- 4. Packages of dry wipes or mop pads

Although the question is not new to the industry, the publication of the revised version of USP Chapter <797> has increased the question's frequency due to the sentence from Section 7.1.2 regarding supplies:

"Once opened, sterile cleaning and disinfecting agents and supplies (e.g., closed containers of sterile wipers) and sterile 70% IPA may be reused for a time period specified as by the manufacturer and/or described in the facility written SOPs."

As described below, the useful life of a disinfectant or cleaning product after opening can be impacted by chemical and physical stability of the solution. For products that have been validated as sterile either through terminal sterilization or aseptic manufacturing, the "use-by" date also must consider how the hygiene or bioburden of the product is influenced by the surrounding environment.

## Before Opening (Chemical Stability and Sterility)

- A sealed bottle, pouch, or canister of alcohol or disinfectant cleaners from Contec has an expiration date printed on the container.
- For EPA-registered disinfectants, this date represents the shelf life of the unopened item, which is based on studies of the concentration of the active ingredients in the product using EPA-mandated and defined protocols.
- For Contec products not registered with the EPA (*e.g.*, 70% IPA), the expiration dates are based on chemical and physical stability and were determined using internal analyses.
- For products designated as sterile (including dry wipes or mop pads), the expiration date also indicates the expected shelf life of the packaging after the sterilization method (usually gamma irradiation) using techniques associated with the ISO sterility validation process.
- Products cannot be used after the expiration date, whether they have been opened or not.
- Table 1 summarizes the shelf life of Contec products before opening.

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Table 1: Shelf lives of Contec<sup>®</sup> Disinfectant and Cleaning Solutions and Wipes based on chemical and physical stability before the products are opened. For sterile products, this unopened shelf life also considers the package integrity after the sterilization process. See Appendix C for the list of products covered by this table.

Product	Unopened
Contec® Sterile 70% IPA (solution)	5 years
Contec® Sterile 70% IPA Wipes	2 years
PREempt® Plus Disinfectant (solution and wipes) (nonsterile)	3 years
PREempt® (solution and wipes) (nonsterile)	3 years
Contec <sup>®</sup> Healthcare TB1-3300 <sup>™</sup> Disinfectant (solution) (nonsterile and sterile)	2 years
Contec <sup>®</sup> Healthcare TB1-3300 <sup>™</sup> Disinfectant (wipes) (sterile)	1.5 years
Contec <sup>®</sup> Healthcare TB1-3300 <sup>™</sup> Disinfectant (wipes) (nonsterile)	2 years
PeridoxRTU® Sporicide, Disinfectant and Cleaner (solution) (nonsterile and sterile)	2 years
Wipes and Mop Pads (sterile)	Various. See package for expiration date.

## After Opening (Chemical Stability)

- Contec has conducted numerous studies to understand the chemical and physical stability of our disinfectants or cleaning solutions after the containers (bottles, pouches, canisters) are opened.
- Depending on the solution and type of container, data indicate the products remain within specifications for periods ranging from 7 days to 6 months. However, those studies are based on appropriate use of the product, including proper closure of the container after access.
- For example, if properly resealed, the percentage of isopropyl alcohol (IPA) in pouches of presaturated IPA wipes remained within specified limits during 45 days of use. However, if the pouches are not resealed properly, the percentage of IPA on the wipes may drop substantially within one day. (Appendix A).
- Table 2 lists the prescribed shelf lives of products after opening based on studies that measured chemical stability.

Table 2: Shelf lives of Contec Disinfectant and Cleaning Solutions and Wipes based on chemical and physical stability for products before and after opening. For sterilized products, the unopened shelf life also considers the package integrity after the sterilization process. See Appendix C for the list of products covered by this table.

Product	Unopened	After Opening
Contec® Sterile 70% IPA (solution)	5 years	6 months
Contec® Sterile 70% IPA (wipes) including Critical Site® Sterile Wipes (sterile)	2 years	1 month
$PREempt^{\scriptscriptstyle \otimes}$ Plus Disinfectant (solution and wipes) (nonsterile)	3 years	3 years
PREempt® (solution and wipes) (nonsterile)	3 years	3 years
Contec <sup>®</sup> Healthcare TB1-3300 <sup>™</sup> Disinfectant (solution) (nonsterile and sterile)	2 years	6 months
Contec <sup>®</sup> Healthcare TB1-3300 <sup>™</sup> Disinfectant (wipes) (sterile)	1.5 years	7 days
Contec <sup>®</sup> Healthcare TB1-3300 <sup>™</sup> Disinfectant (wipes) (nonsterile)	2 years	7 days
PeridoxRTU® Sporicide, Disinfectant and Cleaner (solution) (nonsterile and sterile)	2 years	6 months

\*As discussed above, the products cannot be used beyond the maximum shelf life date as listed for unopened containers, regardless of when they were opened.

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## After Opening (Sterility)

- Maintaining sterility after opening a container is the most challenging variable to predict. Contec designs containers and guides the use of our sterilized products to minimize the risk of contamination after opening.
- Products that contain solutions with antimicrobial properties, such as disinfectants or alcohol, will exhibit some level of protection against extrinsic contamination. However, the sterility validations described above only apply to unopened packages.
- Contec has conducted several studies to assess the risk of microbial contamination in open containers. Results indicate that proper and consistent use of aseptic technique during use dramatically reduces the risk that the solutions and presaturated wipes will become contaminated.
- Contec cannot predict or control the environmental conditions, aseptic technique, and work practices during product use.
- Users should demonstrate and document their approach through specific SOPs that address how these products are used in their facilities, audit the consistency of work practices, make improvements where necessary, and determine and document their "use-by" date.
- Table 3 summarizes the results of studies that measured bioburden in products after opening.
- Appendix A includes details of the studies that assessed shelf life after opening. In most cases, the studies were conducted in unclassified environments with lower requirements for cleanliness than a compounding cleanroom suite.
- Appendix B includes recommendations on procedures to reduce the risk of contamination after opening.
- Appendix C lists specific item codes for each type of product described in this bulletin.

Table 3: Results of Contec Studies on the Hygiene of Sterile Products after Opening. See Appendix C for the list of products covered by this table.

Product	Duration of Study
Contec® Sterile 70% IPA (solution)	6 months
Contec® Sterile 70% IPA (wipes)	7 days
Contec <sup>®</sup> Healthcare TB1-3300 <sup>™</sup> Disinfectant (solution) (sterile)	6 months
Contec <sup>®</sup> Healthcare TB1-3300 <sup>™</sup> Disinfectant (wipes) (sterile)	Study Pending
PeridoxRTU® Sporicide, Disinfectant and Cleaner (solution) (sterile)	6 months

NOTE: Contec Healthcare manufactures and distributes multiple disinfectant and chemical agents for use in cleanrooms. Please contact your Contec Healthcare representative for the latest technical updates regarding the shelf life of products before and after opening.

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## Appendix A: Studies to Substantiate Shelf life After Opening

## 70% Isopropyl Alcohol Solution (Sterilized) In-Use Shelf life Study

#### Objective

Determine the active ingredient concentration and hygiene status of Contec's Isopropanol 70% IPA/30% DI Water in bottles after the product has been opened and used over a period of several months in an unclassified environment.

#### **Test Procedures**

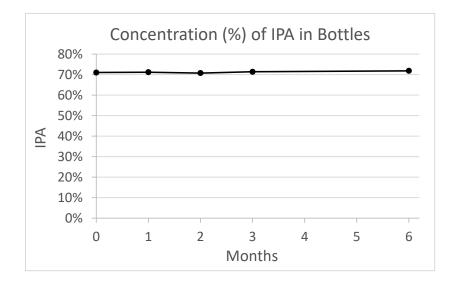
Three 16 oz. bottles of Sterile 70% IPA/30% DI Water (SB167030IR) were placed into a non-classified lab environment (research lab), with the bottles removed from their outer packaging. The trigger sprayer was installed, and each bottle was sprayed five times to expel liquid through the trigger sprayer. Samples were then taken from each bottle through the trigger sprayer to measure the concentration of IPA with gas chromatography. After the initial analysis, the bottles remained in the non-classified lab environment for the duration of the study. The bottles were sprayed five times each week. After 1, 2, 3 and 6 months, samples were collected to test for the percentage of IPA using gas chromatography. The bottles were occasionally transported through a non-classified manufacturing environment to the analytical lab for sampling/testing. The valve on each trigger sprayer bottle remained open and was never twisted into the "closed" position. At each time point, triplicate samples from each bottle were measured for percent IPA using gas chromatography. Between analysis from each bottle, a 70% standard solution of IPA was tested to verify the precision of the instrument.

After the 6-month concentration study was completed, the bottles were sent to an outside testing lab to determine if any microbial contamination could be recovered from the bottles. Samples (95 mL) were collected through the trigger sprayers on each of the three bottles.

#### Results

#### Figure 1: Concentration of IPA over time - Average of 3 bottles

Throughout the study, the concentration of IPA in all 3 bottles remained very consistent and was still within the  $\pm 2\%$  acceptable range around the target of 70% IPA.



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As shown in the report below from an accredited third-party lab, no contamination was recovered from 95 mL samples from the three bottles that were opened, stored, and used in a non-classified environment for six months. While the test referenced below is a sterility method, the lack of growth does not constitute a formal sterility validation. It simply means that use of the product over 6 months did not result in measurable contamination.

Test Facility 1265 Kenne Marietta, G/	stone Circle	This report is confider used for advertising or without written permiss to the sample(s) tested		U.S. Manufactur and Testin Biologics - Advanced	ing P 등 팩 송 라 g Iherapies - Medical Devices	
	Contec, Inc. 525 Locust G Spartanburg,				2842 1 of 1 2016	
	Attn: Michelle					
		STERILITY T	EST REPORT			
Sample Inf	ormation:	Sterile IPA Family	SB167030IR, 4247	56		
Date Recei Date in Tes Date Comp Test Inform	st: oleted:	June 24, 2016 June 30, 2016 July 14, 2016 Test Code: 1223 Membrane Filtratic Procedure #: BS2	on, USP			
	TEST PA	RAMETERS	PRO	оист		
	Approximate Vo	lume Tested	95	95		
	Number Tested Type of Media		3	3		
			SCD	FTM		
	Media Volume		300 mL	300 mL		
	Incubation Perio	d	14 Days	14 Days		
	Incubation Temp	perature	20 °C to 25 °C	30 °C to 35 °C		
	RESULTS		3 NEGATIVE	3 NEGATIVE		
Justina Frost   Digtally signed by Justina Frost   QA Reviewer   Date   Testing conducted in accordance with current Good Manufacturing Practices.   1265 Kennestone Circle • Marietta, GA 30006 • 888.847.0633 • 770.514.0222 • Fax 770.514.0224						
12	65 Kennestone Circle	e • Marietta, GA 30066	• 888.847.6633 • 77	0.514.0262 • Fax 770	0.514.0294	

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## 70% Isopropyl Alcohol Wipes (Sterilized) In-Use Shelf life Study (Chemical Stability)

#### Objective

Determine impact of properly resealing the pouch on the percentage of IPA on presaturated wipes after removing wipes from pouches over a period of several weeks.

#### Test Procedures

Pouches of sterilized nonwoven wipes presaturated with 70% IPA/30% DI water (PS-911EB) were divided into two sets of triplicate pouches: 1) Pouches where the peel and reseal was properly resealed after removing a wipe and 2) Pouches where the peel and reseal was opened to remove a wipe, but then not properly resealed.

After removing a presaturated wipe from each pouch, the IPA/water solution was expressed and measured for percent IPA using chromatography. The process was repeated 15 times over 27 days unless the concentration of IPA dropped below 68% on consecutive measurements.

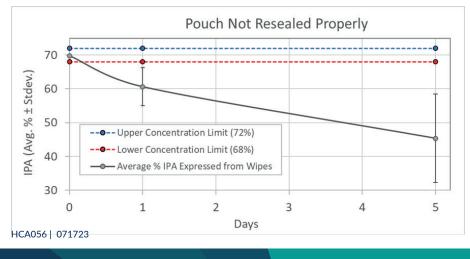
The measured concentrations (%) of IPA were averaged and compared to manufacturing specifications: The upper limit of this specification is 72% IPA (green dashed line) and the lower limit is 68% IPA (red dashed line).

#### Results

The percentage of IPA remains stable and within specification when the pouch is properly re-sealed after every access.



If the pouch is not properly resealed, the percentage of IPA in the wipes drops below specification within 1 day.



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## 70% Isopropyl Alcohol Wipes (Sterilized) In-Use Shelf life Study (Hygiene)

#### Objective

Determine the hygiene status of sterilized 70% IPA wipes after the product has been opened and used over a period of several days in an industrial cleanroom.

#### **Test Procedures**

Three pouches of sterilized wipes presaturated with 70% IPA/30% DI water (PS-911EB, 9" x 11" wipes, 30 wipes per pouch) were obtained for testing. The pouches were opened in an ISO class 5 cleanroom using aseptic technique. One wipe was removed from each pouch and collected for bioburden testing. Another three wipes were removed and used for cleaning. The pouches were resealed as directed and stored in the cleanroom. The process was repeated six additional times over a period of 9 days. Wipes collected from the three pouches were combined and processed for bioburden using a conventional extraction technique (stomaching with Fluid D) followed by membrane filtration and incubation on Tryptic Soy Agar supplemented with neutralizers. The agar plates with membrane filters were incubated for at least 2 days at 30°C and at then at least 5 days at 25°C. The membrane filters were examined for microbial growth after each incubation step. Based on the volume used to extract the microbes from the three wipes and the volume filtered, the sensitivity of the test was 1 CFU/wipe.

#### Results

No microbes (<1 CFU/wipe) were recovered from the wipes throughout the study.

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## Contec<sup>®</sup> Healthcare TB1-3300<sup>™</sup> Disinfectant Solution (Sterilized) In-Use Shelf life Study

#### Objective

Determine the concentration of active ingredients (ethyl alcohol and quaternary ammonium compound) and hygiene status of sterilized Contec's TB1-3300 Disinfectant in bottles after the product has been opened and used over a period of several months in an unclassified environment.

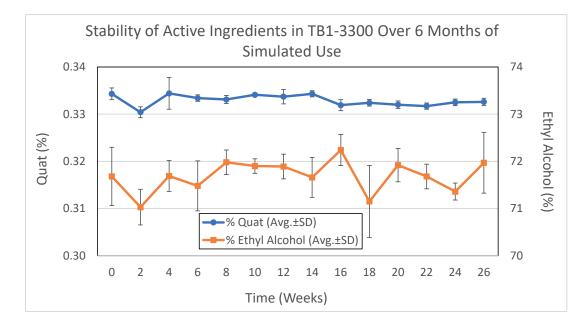
#### **Test Procedures**

Five bottles of sterilized TB1-3300 (HCTB3300IR) with push-pull caps were obtained for testing. All bottles were opened in a non-aseptic manner and push-pull caps were installed on each bottle. At the initial cap installation (T<sub>0</sub>) and every 2 weeks for 6 months, 30 mL of liquid were dispensed from the push-pull cap, the caps were closed on the push-pull bottles, and bottles were stored at room temperature on the benchtop. At each time point, the solutions dispensed from three of the bottles were tested for ethyl alcohol and quaternary ammonium compound. The liquid dispensed from the remaining two bottles was disposed. After testing the bottles for 6 months, the five bottles were sent to an outside testing lab to determine if any microbial contamination could be recovered from the bottles. Samples (250 mL) were collected through the push-pull caps on each of the five bottles.

#### Results

The active ingredients in TB1-3300 are a quaternary ammonium compound (DDAC) at a nominal concentration of 0.33% and ethyl alcohol at a nominal concentration of 72.5%. As shown on a typical Certificate of Analysis (COA) for TB1-3300, the specification range for DDAC is 0.30 – 0.36% and the specification range for ethyl alcohol is 70.33 – 74.68%.

Five bottles of sterilized TB1-3300 (HCTB3300IR) were repeatedly opened, sampled, and tested for stability of the two active ingredients to simulate real world usage over a 6-month time period. The percentages of active ingredients remained stable and within the specification limits over the 6-month period. Fluctuations in the data can be attributed to normal variability of the test method but the concentrations of both ingredients trended downward after 16-20 weeks.



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After 6 months of simulated use in a non-classified laboratory environment, the hygiene status of the TB1-3300 solution (listed as an alternative brand name "CyQuanol" in the report) was tested in a third-party lab using a conventional sterility assay. As shown in the snapshot of the sample report below, all five samples (250 mL from each bottle) were negative for bacterial and fungal growth using two types of recovery media (SCD and FTM).

# FINAL TEST REPORT

Sample Information:	B00126101001
	Cyquanol
Date Received:	September 10, 2021
Date in Test:	September 23, 2021
Date Completed:	October 07, 2021
Test Information:	122500.2
	USP (2 Media) Sterility Membrane Filtration
Procedure #:	SOP-00379 / SOP-00380
STI Reference #:	S0019172-v1

Sample ID	Portion /SIP Tested	Number Tested	Media Type	Media Volume	Incubation Period	Incubation Temperature	Number Negative	Number Positive
MH3300D78920004	250 mL	5	SCD-T-L-S	300 mL	14 Days	20 °C to 25 °C	5	0
MH3300D78920004	250 mL	5	FTM-T-L-S	300 mL	14 Days	30 °C to 35 °C	5	0

850 x 11.00 in

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## Contec<sup>®</sup> Healthcare TB1-3300<sup>™</sup> Disinfectant Wipes (Sterilized) In-Use Shelf life Study

#### Objective

Determine the concentration of active ingredients (ethyl alcohol and quaternary ammonium compound) of sterilized Contec<sup>®</sup> Healthcare TB1-3300<sup>™</sup> Disinfectant Wipes in peel and reseal pouches after the product has been opened and used over a period of one week.

#### **Test Procedures**

Two pouches of sterilized TB1-3300 Disinfectant Wipes (HCTB3315IR) were obtained for testing. The pouches were opened, and 4 wipes were removed. The pouch was then properly resealed and the disinfectant solution from the wipes was analyzed for levels of quaternary ammonium compound (DDAC) and ethyl alcohol. Each day for four additional days, 4 wipes were removed from each pouch, and the pouch was properly resealed. On the fifth day of the study, 4 wipes from each pouch were removed and the disinfectant solution was analyzed for levels of quaternary ammonium compound and ethyl alcohol. Three days later, another 4 wipes were removed, and the disinfectant solution from the wipes was again analyzed for levels of quaternary ammonium compound and ethyl alcohol.

#### Results

The active ingredients in TB1-3300 are a quaternary ammonium compound (DDAC) at a nominal concentration of 0.33% and ethyl alcohol at nominal concentration of 72.5%. As shown on a typical Certificate of Analysis (COA) for TB1-3300, the specification range for DDAC is 0.30 – 0.36% and the specification range for ethyl alcohol is 70.33 – 74.68%.

The concentrations of the quaternary ammonium compound (DDAC) and ethyl alcohol remained stable and within specifications during the week of simulated use. As described in the body of this report, no measurements of hygiene (bioburden) of the wipes were conducted during this study.

Day	Pouch 1		Pou	ch 2
	DDAC Quat (%)	Ethyl Alcohol (%)	DDAC Quat (%)	Ethyl Alcohol (%)
0	0.34	71.88	0.34	71.11
5	0.36	71.63	0.36	70.82
8	0.34	71.97	0.34	70.57

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## PeridoxRTU<sup>®</sup> Sporicide, Disinfectant and Cleaner (Sterilized) In-Use Shelf life Study

#### Objective

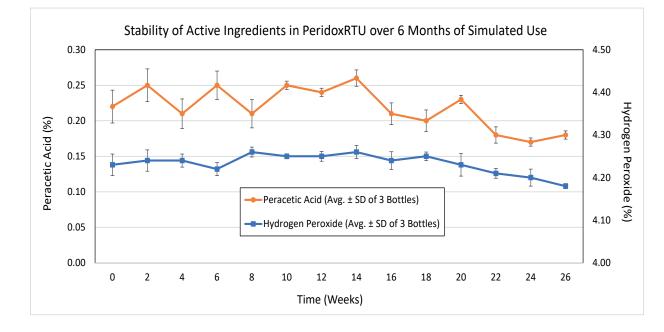
Determine the concentration of active ingredients (peracetic acid and hydrogen peroxide) and hygiene status of sterilized Contec's PeridoxRTU<sup>®</sup> Sporicide, Disinfectant and Cleaner in bottles after the product has been opened and used over a period of several months.

#### **Test Procedures**

Five bottles of sterile PeridoxRTU (HC85335IR) were obtained for testing. All bottles were opened in a nonsterile environment and the reclosable push-pull caps were installed on each bottle. At the initial installation of the cap ( $T_0$ ) and every 2 weeks for 6 months, 20 mL of solution was dispensed from each of the five bottles through the reclosable cap. The caps were then closed properly, and the bottles were stored at room temperature on the benchtop. At each time point, the solution dispensed from three of the bottles were tested for percent peracetic acid and hydrogen peroxide. After 6 months, all five bottles from each product were sent to a third-party laboratory to assess the hygiene of a portion of the remaining solutions.

#### Results

The active ingredients in PeridoxRTU are peracetic acid (nominal concentration of 0.23%) and hydrogen peroxide (nominal concentration of 4.4%). As shown on a typical Certificate of Analysis (COA) for PeridoxRTU, the specification range for peracetic acid is 0.17 - 0.28% and the specification range for hydrogen peroxide is 4.0 - 4.8%. Five bottles of sterilized PeridoxRTU (HC85335IR) were repeatedly opened, sampled and tested for stability of the two active ingredients to simulate real world usage over a 6-month time period. The concentrations of peracetic acid and hydrogen peroxide remained within the specification limits over the 6-month period. Fluctuations in the data can be attributed to normal variability of the test method but the concentrations of both ingredients trended downward after 16-20 weeks.



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After 6 months of simulated use in a non-classified laboratory environment, the hygiene status of the PeridoxRTU solution (300 mL from each bottle) was tested in an outside lab using a conventional sterility assay. As shown in the snapshot of the sample report, all five samples were negative for bacterial and fungal growth using two types of recovery media (SCD and FTM).

## FINAL TEST REPORT

Peridox RTUDate Received:September 09, 2021Date in Test:September 21, 2021Date Completed:October 05, 2021Test Information:122500.2
Date in Test:September 21, 2021Date Completed:October 05, 2021Test Information:122500.2
Date Completed:October 05, 2021Test Information:122500.2
Test Information: 122500.2
USP (2 Media) Sterility Membrane Filtration
Procedure #: SOP-00379 / SOP-00380
STI Reference #: S0019090-v1

Sample ID	Portion /SIP Tested	Number Tested	Media Type	Media Volume	Incubation Period	Incubation Temperature	Number Negative	Number Positive
GH32090508201	300 mL	5	SCD-T-L	400 mL	14 Days	20 °C to 25 °C	5	0
GH32090508201	300 mL	5	FTM-T-L	400 mL	14 Days	30 °C to 35 °C	5	0

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## **Appendix B**

#### Variables to Consider When Establishing Use-By Dates for Containers After Opening

- 1. Determine the typical duration of use for containers of sterile disinfectants or cleaning agents.
- 2. Discuss the anticipated use of each product with Contec Healthcare representatives, who will assist each organization in selecting the product and container size that best suits the volume and type of practice and typical duration of use after opening.
- 3. Examine the results of studies conducted by Contec that measured the chemical and physical stability of products after opening. When properly resealed, the products are chemically and physically stable for one week – several months, depending on the product.
- 4. Base "use-by" dates for disinfectants and cleaning solutions in bottles and saturated wipes on these factors:
  - Current common use-patterns
  - Results of gloved fingertip-thumb and surface sampling and subsequent measures to reduce the risk of contamination
  - Results of simulated use shelf life studies from Contec Healthcare
  - Assessing the hygiene of products at the end of their proposed use-by dates to substantiate the use-by dates in SOPs

#### Initiate a Best Practice Approach to Reduce the Risk of Contamination after Opening Packages and Record the Approach in SOPs

- Open presaturated wipe packages only in the ISO class environment where they will be used; however, best practice is to open, assemble and close sterile 70% IPA and disinfectant solutions in ISO 5 air only.
- Always use aseptic technique when opening packages.
- Touch and remove only the desired number of wipes.
- Properly close the lid or reseal the pouch immediately after removing the product.
- Never open the container in ISO class conditions worse than where they will be used (*e.g.*, do not open in ISO 7 and later move to and use in ISO 5).
- If a product removed from the PEC for storage is not opened in the higher ISO class area, and there is a desire to reintroduce it into a lower ISO class (*e.g.*, going from ISO 7 storage back into the ISO 5 PEC), ensure the product's packaging is wiped with sterile IPA prior to reintroducing into the PEC.
- If a package is opened in a room with a higher ISO class (used in ISO 5 then moved and opened in ISO 7), it must now be dedicated for use in ISO 7 or 8.

#### How to establish use-by dates for containers after opening

- 1. Determine the typical duration of use for containers of sterile disinfectants or cleaning agents.
- 2. Discuss with your Contec Healthcare representative to find the container size that best matches your typical duration of use after opening.
- 3. Examine the results of studies conducted by Contec that measured the chemical and physical stability of the products after opening.
  - When properly resealed, the products are chemically and physically stable for weeks-months.
- 4. Adopt the best practices to minimize the risk of contamination described below.
- 5. Base the "use-by" dates for disinfectants and cleaning solutions in bottles and presaturated wipes on:
  - Your current common-use patterns.
  - Results of environmental monitoring and measures to reduce risk of contamination.
  - Results of simulated use shelf life studies from Contec Healthcare.

6. Consider assessing the hygiene of products at the end of their proposed use-by dates to substantiate the dates for your SOPs.

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#### Best practices to minimize the risk of contamination after opening

- 1. Access the items by opening only in primary class environment where products will be used using aseptic technique.
- 2. Properly close lid or reseal pouch.
- 3. If moved to higher ISO class, do not open and make sure packaging is wiped with sterile IPA or disinfectant prior to re-entry into lower ISO class.
- 4. If the package is opened in a room with a higher ISO class, one must now dedicate to use it in that room or discard.

#### **Appendix C: Product Codes for Contec Products Referenced in Tables**

	Contec Product Code			
Description	Nonsterile	Sterile		
Contec <sup>®</sup> 70% Isopropanol				
16 oz. spray bottle	Request options	SB167030IR		
16 oz. bottle flip-top	N/A	HCFT7030IR		
32 oz. spray bottle	Request options	SB327030IR		
32 oz. bottle flip-top	N/A	HCFT7030IR-32		
1-gallon bottle	Request options	SB1287030IR		
Contec <sup>®</sup> 70% Isopropanol Wipes and Mop Pads				
PROSAT <sup>®</sup> 4" x 4" presaturated wipes for critical sites	N/A	HCPS6044		
PROSAT <sup>®</sup> 9" x 11" MBPP presaturated wipes	HCPS2328	HCPS2328IR		
PROSAT <sup>®</sup> 9" x 11" Poly/Cell presaturated wipes	HCPS0002	HCPS0002IR		
PROSAT <sup>®</sup> 9" x 11" MBPP presaturated wipes	PS-911	PS-911EB		
EasyReach <sup>™</sup> presaturated mop pads	N/A	PSME0001		
PREempt <sup>®</sup> Plus Solution and Wipes				
32 oz. bottle	2B101	N/A		
1-gallon bottle	2B105	N/A		
6" x 7" wipes	2B221	N/A		
PREempt <sup>®</sup> RTU Solution and Wipes				
32 oz. bottle	21101	N/A		
1-gallon bottle	21105	N/A		
6" x 7" wipes	21221	N/A		
Contec <sup>®</sup> Healthcare TB1-3300 <sup>™</sup> Disinfectant Solution	and Wipes			
32 oz. bottle	HCTB3300	HCTB3300IR		
1-gallon bottle	HCTB3305	HCTB3305IR		
9" x 11" wipes	HCTB3315	HCTB3315IR		

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Description	Contec Pro	oduct Code
Description	Nonsterile	Sterile
PeridoxRTU Sporicidal Disinfectant Solution		
USA		
32 oz. bottle	HC85335	HC85335IR
1-gallon bottle	HC85336	HC85336IR
Canada		
32 oz. bottle	HC85365	HC85365IR
1-gallon bottle	HC85366	HC85366IR
Dry Wipes and Mop Pads		
EasyReach Pad, ultrasonic	N/A	HCMT0015
EasyReach Pad, quilted	N/A	MEQT0002
9" x 9" dry wipes	N/A	C2-99IR/25
12" x 12" dry wipes	N/A	C2-1212IR

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